

DETAILS
FOR
LAP MACHINES AND
HEILMANN COMBERS.

JOHN HETHERINGTON & SONS, Limited,
MANCHESTER.

SPECIAL.
COLL
TS
1583
.D42
1890z



DETAILS FOR LAP MACHINES.

JOHN HETHERINGTON & SONS,
LIMITED,

Makers of all kinds of
Cotton Opening, Scutching, Carding, Preparing,
Spinning and Doubling Machinery, also
Engineers' Tools, Mill Gearing, Hoists, etc.,

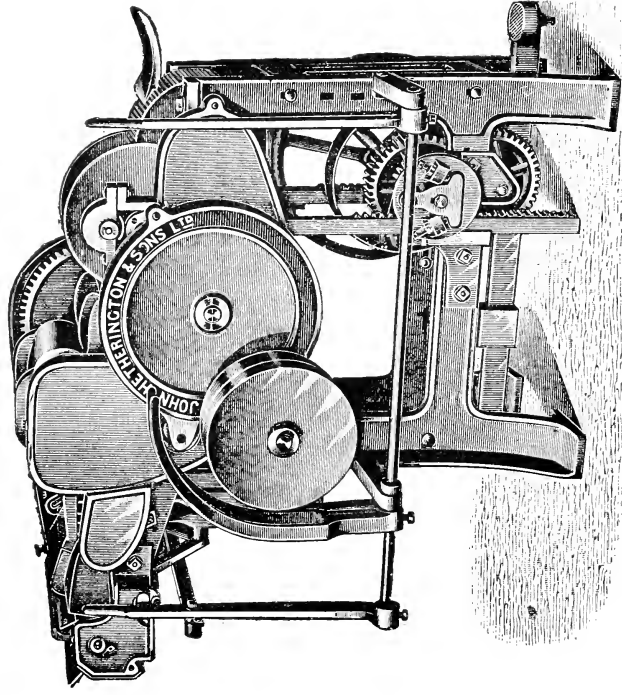
POLLARD STREET, ANCOATS,
MANCHESTER.

Telephone No.
230.

Telegraphic Address:
"HETH," MANCHESTER.

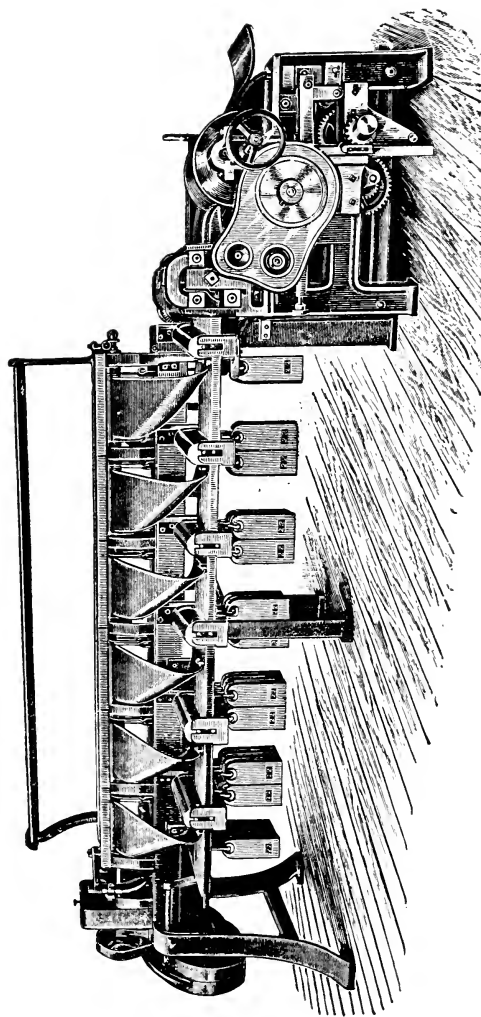
UMass Dartmouth

JOHN HETHERINGTON & SONS, LIMITED, MANCHESTER.

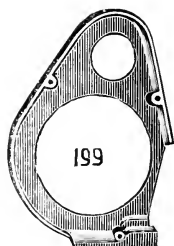


SLIVER LAP MACHINE.

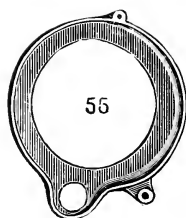
JOHN HETHERINGTON & SONS, LIMITED, MANCHESTER.



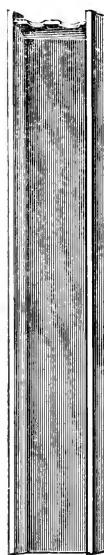
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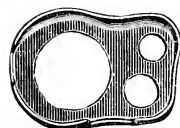
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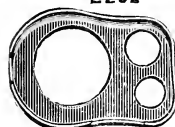
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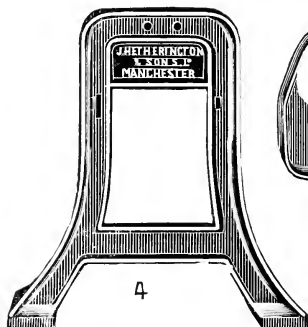
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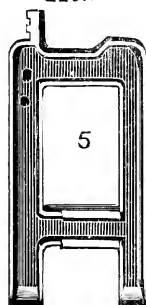
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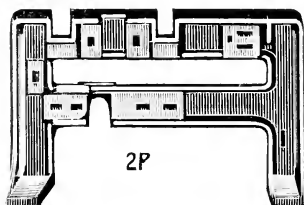
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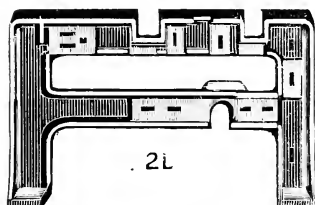
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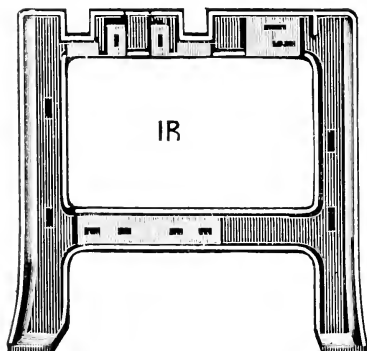
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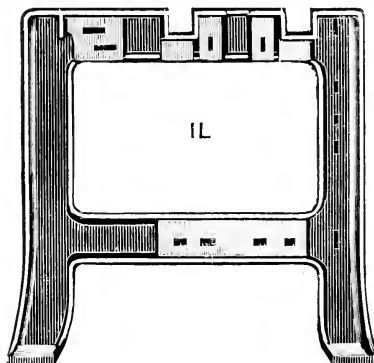
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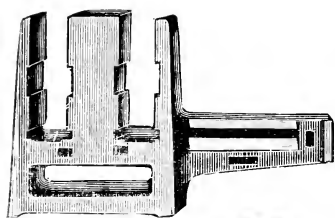
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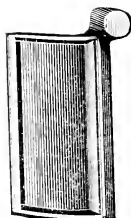
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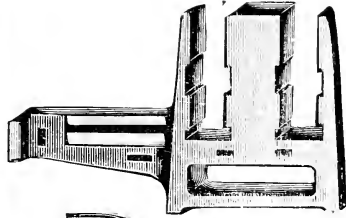
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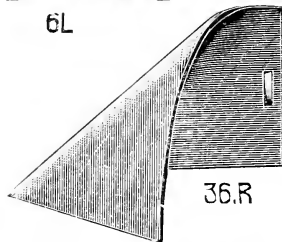
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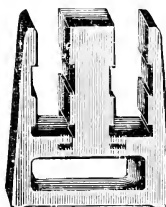
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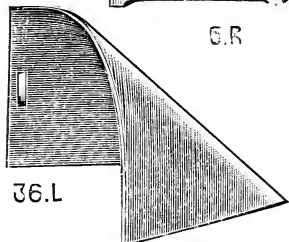
6R



36.R



6.A



36.L



222



225



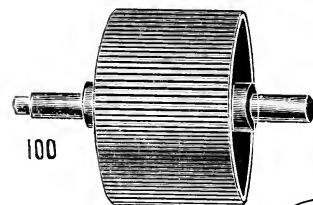
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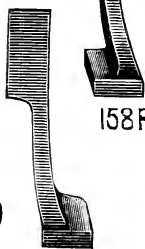
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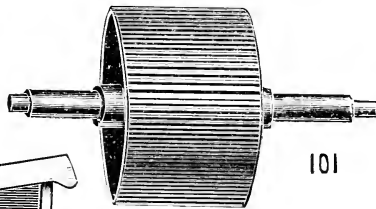
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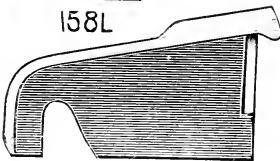
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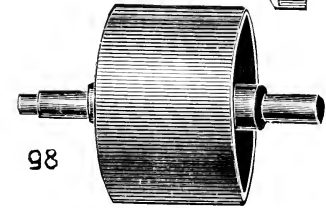
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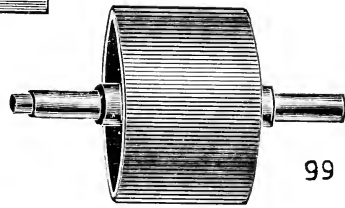
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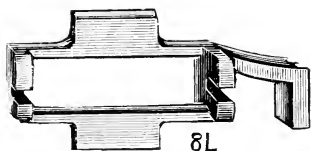
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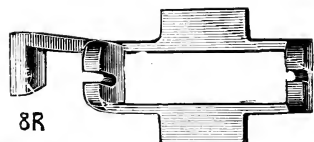
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8L



131



8R



228



176



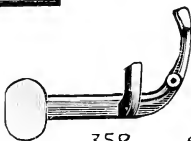
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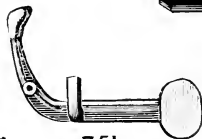
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232R



35R



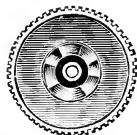
35L



34



60



59



74



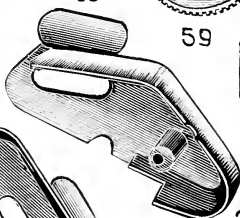
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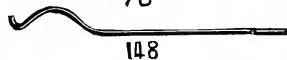
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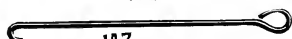
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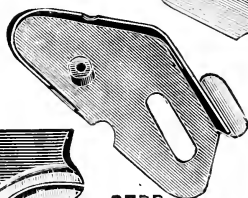
233L



148



147



233R



44



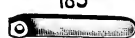
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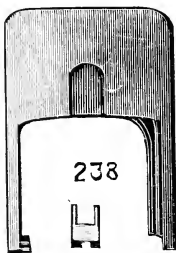
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10R



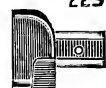
127R



238



44A



127L



16



10L



164



156



27



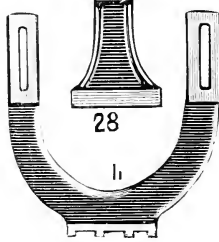
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15



28A



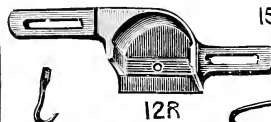
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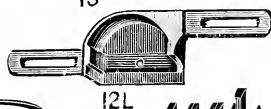
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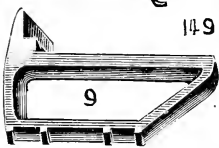
12R



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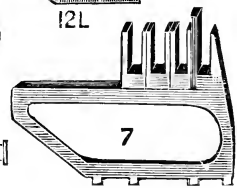
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9



145



7



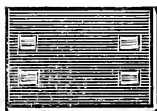
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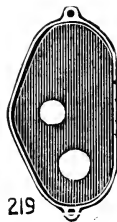
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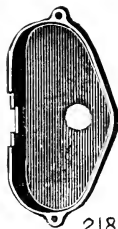
135.R



135.L



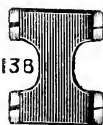
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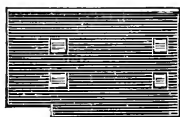
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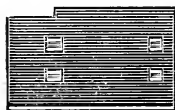
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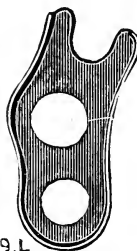
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136.R



136.L



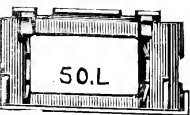
129.L



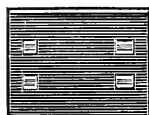
129R



30



50.L



137

211L



211.R



50.R

159



212

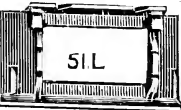


52

160.R



213.L



51.L

160.L



213.R



51.R

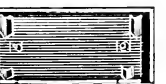
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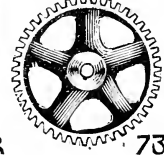
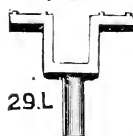
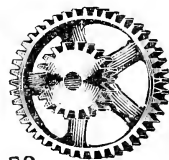
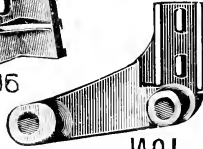
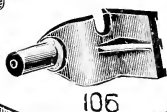
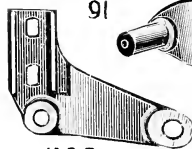
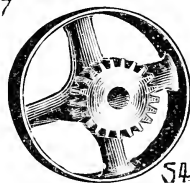
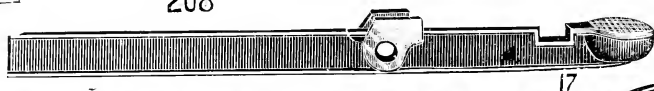
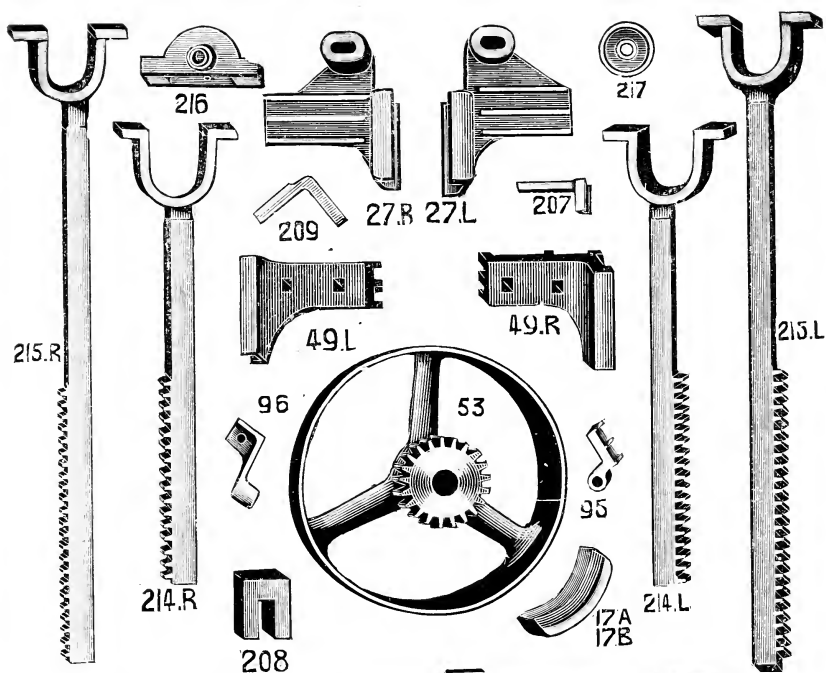


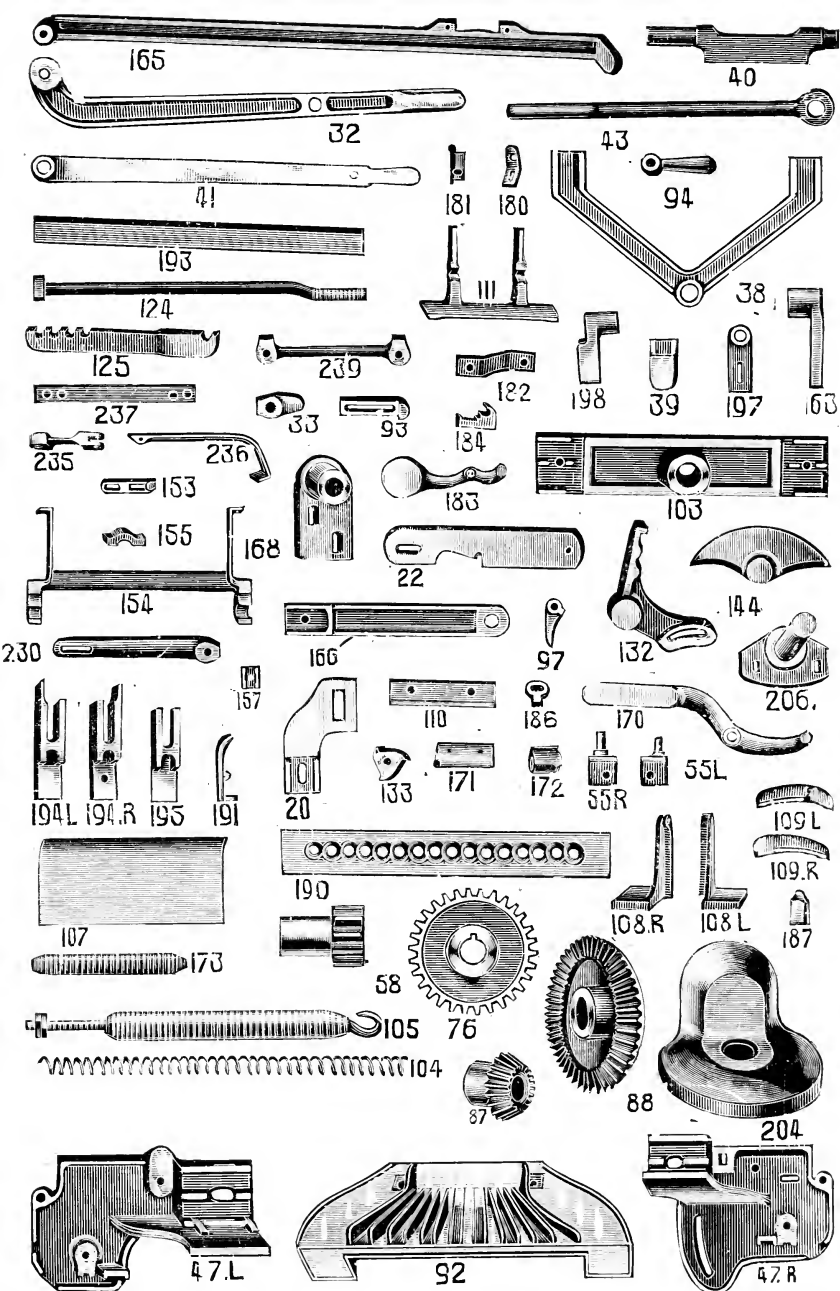
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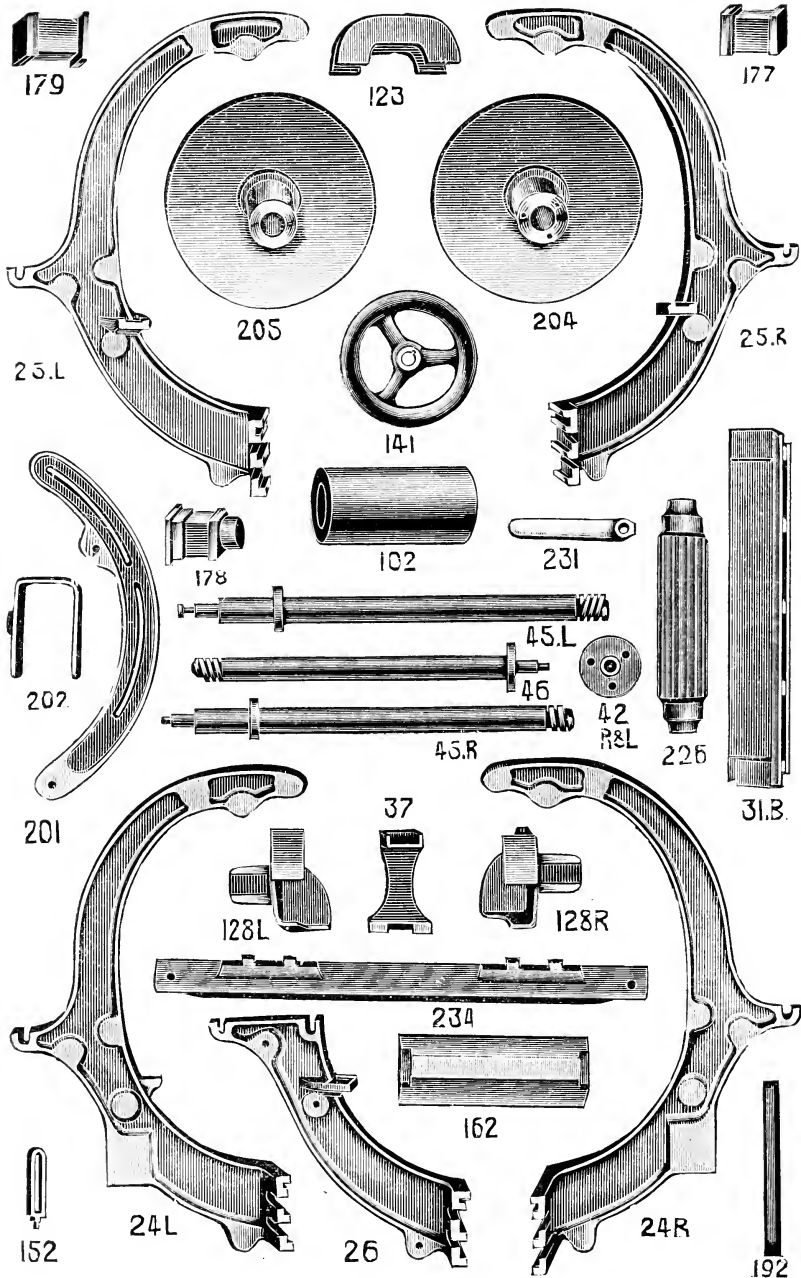


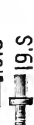
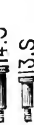
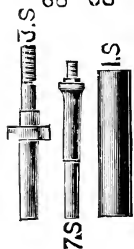
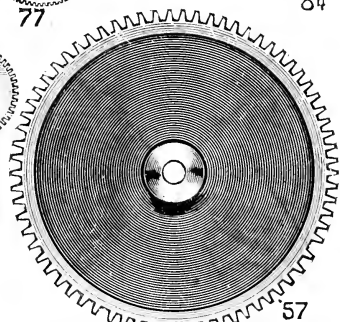
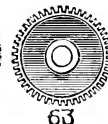
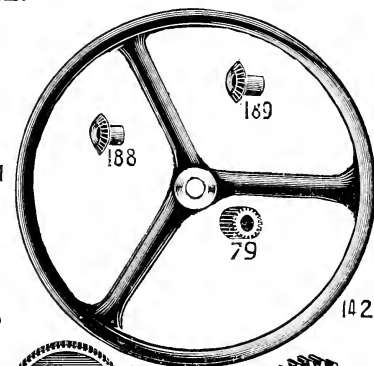
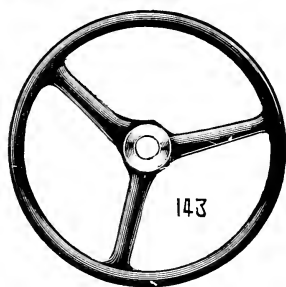
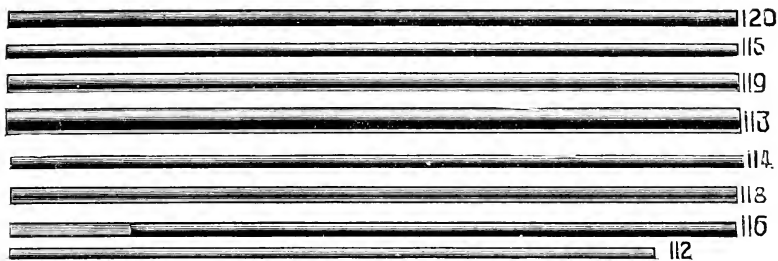
161.L











DETAILS FOR LAP MACHINES.

NOTE.—In ordering Sundries for Lap Machines, kindly state the width of Lap of the Machine they are required for.

- 1R. Lap Sides, Sliver Lap
- 1L. „ „ „ „
- 2R. „ „ Ribbon Lap
- 2L. „ „ „ „
- 3. Roller Beam „ „
- 4. Frame End „ „
- 5. Spring Piece „ „
- 6R. Lap Stands, Sliver Lap
- 6L. „ „ „ „
- 6A. Lap Stand without Arms, Ribbon Lap
- 7. Roller Stand, Ribbon Lap
- 8R. Large Calender Bracket, Ribbon Lap
- 8L. „ „ „ „
- 9. Gearing End Roller Stand „ „
- 10.R Upright Bracket, Ribbon Lap
- 10L. „ „ „ „
- 11. Horn Bracket „ „
- 12R. Horn Box „ „
- 12L. „ „ „ „
- 13. Back Stretcher, Sliver Lap
- 14. Front „ „ „
- 15. Small Curl, Ribbon Lap
- 16. Roller Stand Slide, Ribbon Lap
- 17. Brake Lever
- 17A. Clog for Brake Lever, Ribbon Lap
- 17B. „ „ „ Sliver Lap
- 18. Lap Cradle
- 19. Heart Bracket for 41 T. and 26 T., Sliver Lap
- 20. Cross Lever Bracket, Sliver Lap
- 21. Stop Motion Cross Lever Bracket, Ribbon Lap
- 22. Knocking-off Catch, Ribbon Lap
- 23AR. Rack Plate
- 23AL. „ „
- 23BR. „ „
- 23BL. „ „

- 24R. Large Back Bracket, Gearing End, Ribbon Lap
 24L. " " " " " " "
 25R. " " " Off " " "
 25L. " " " " " " "
 26. Small Back Bracket, Ribbon Lap
 27. Cast Iron Slide, Gearing End Stand, Ribbon Lap
 27R. Rack Slide, Ribbon Lap
 27L. " " " "
 28. Pillar Bracket " "
 28A. Cap for ditto " "
 29R. Drum Carrier Wheel Bracket
 29L. " " " "
 30. Back Plate, Sliver Lap
 31. Knife " " "
 32. Setting-on Rod Handle, Sliver Lap
 33. Stop Rod Bracket
 34. Clutch Weight Bracket, Ribbon Lap
 35R. Clutch Weight, Ribbon Lap
 35L. " " " "
 36R. Large Curl " "
 36L. " " " "
 37. Large Curl Bracket, Ribbon Lap
 38. Eccentric Stretcher (Weight Relieving Motion),
 Sliver Lap
 39. Small Bracket for Spring, Ribbon Lap
 40. Eccentric (Weight Relieving Motion), Sliver Lap
 41. Setting-on Rod Handle
 42R. Lap Mandril Nut
 42L. " " " "
 43. Handle (Weight Relieving Motion), Sliver Lap
 44. Stud Bracket for Stop Rod, Ribbon Lap
 44A. Stud for Stop Rod, Ribbon Lap
 45R. Lap Mandril " "
 45L. " " " "
 46. " " Sliver Lap
 47R. Back Bracket " "
 47L. " " " "
 48R. Bottom Gearing Bracket, Sliver Lap
 48L. " " " " "

- 49R. Rack Slides
 49L. " " "
 50R. Revolving Clearer Cover, Gearing End, Ribbon Lap
 50L. " " " " " "
 51R. " " " Off " " "
 51L. " " " " " " "
 52. " " " Middle, " " "
 53. Brake Pulley and 21 T. Spur Wheel, Sliver Lap
 54. " " and 21 T. " " Ribbon Lap
 55R. Hinge for Back Plate, Sliver Lap
 55L. " " " " " "
 56. Round Guard for 72 T. Plate Wheel, Sliver Lap
 57. 72 T. Plate Wheel, Sliver Lap
 58. 12 T. Driving Wheel, " "
 59. 90 T. Clutch " " "
 60. Clutch Box, " "
 61. 80 T. Back Roller Wheel, Sliver Lap
 62. 50 T. Calender Roller Wheel, Sliver Lap
 63. 64 T. Back Roller " "
 64. 70 T. " " " Ribbon Lap
 65. Taking-in Wheel (usually 24 T.), Sliver Lap
 66. 41 T. and 26 T. Compound Carrier, Sliver Lap
 67. 33 T. Front Roller Wheel, Sliver Lap
 68. 26 T. Back " " " "
 69. 22 T. Middle " " " "
 70. 37 T. Back " " " Ribbon Lap
 71. 30 T. Back " " " "
 72. 54 T. Calender Driving Wheel, Ribbon Lap
 73. 45 T. Brake Wheel
 74. 49 T. Clutch Wheel, Ribbon Lap
 75. Clutch Box, Ribbon Lap
 76. 30 T. Drum Wheel
 77. 100 T. Crown Wheel, Ribbon Lap
 78. Draft Wheel, Ribbon Lap
 79. 25 T. Front Roller Wheel, Ribbon Lap
 80. 50 T. Carrier, Ribbon Lap
 81. 40 T. Wood Roller Wheel, Ribbon Lap
 82. 60 T. " " " "
 83. 50 T. Broad Carrier, Ribbon Lap "

84. 21 T. Calender Roller Wheel
 85. 25 T. Drum and Calender Carrier Wheel
 86. 64 T. Bossed Carrier, Sliver Lap
 87. 20 T. Driving Bevel, Ribbon Lap
 88. 40 T. Bevel and 14 T. Spur Driving Wheel,
 Ribbon Lap
 89. 45 T. and 21 T. Brake Wheel
 90. Rack Regulating Wheel
 91. " " " Bush
 92. Tin Conductor, Sliver Lap
 93. Rack Knocking-off Bracket, Sliver Lap
 94. Handle for Finger Shaft, Sliver Lap
 95. Side Shaft Bracket, " "
 96. " " " " "
 97. Finger for $\frac{5}{8}$ Side Shaft " "
 98. Front Fluted Drum, " "
 99. Back " " " "
 100. Front " " Ribbon Lap
 101. Back " " " "
 102. Wood Lap Bobbin
 103. Driving Shaft Bracket, Ribbon Lap
 104. Spring for Square Ended Stop Rod, Ribbon Lap
 105. Knocking-off Spring, Ribbon Lap
 106. 25 T. Calender and Drum Wheel Bracket,
 Ribbon Lap
 107. Sheet Iron Sliver Plate
 108R. Bracket for ditto
 108L. " "
 109R. Sliver Guides
 109L. " "
 110. Tumbler Knife, Ribbon Lap
 111. Tumblers, " "
 112. Handle Shaft, " "
 113. Driving " " "
 114. $\frac{5}{8}$ in. Stop Rod " "
 115. $\frac{3}{4}$ in. Wood Roller Shaft, Ribbon Lap
 116. Square Ended Stop Rod, " "
 117. Round " " " " "
 118. Fish Tail Shaft, " "

119. $\frac{7}{8}$ in. Bevel Wheel Shaft, Ribbon Lap
 120. $\frac{7}{8}$ in. Creel Rod, " "
 121. Brake Shaft
 122. Short $\frac{5}{8}$ in. Shaft for Radius Bracket, Ribbon Lap
 123. Bridge for Calender Rollers
 124. Bridge Bolt
 125. Bridge Lever
 126. 1 in. Handle Shaft, Ribbon Lap
 127R. 20 T. Bevel Wheel Guard, Ribbon Lap
 127L. " " " " " "
 128R. 20 T. Bevel and 54 T. Spur Cover. Ribbon Lap
 128L. " " " " " "
 129R. 3 Wheel Gearing End Guard, " "
 129L. " " " " " "
 130. Knocking-off Bracket for "Square Ended" Rod,
 Ribbon Lap
 131. Bevel Shaft Bracket, Ribbon Lap
 132. " " " for Carrier Wheel. Ribbon Lap
 133. Spider, Ribbon Lap
 134. Spider Shaft, Ribbon Lap
 135R. Gearing End Curl Plate, Ribbon Lap
 135L. " " " " " "
 136R. Off " " " " " "
 136L. " " " " " "
 137. Middle Curl Plate, Ribbon Lap
 138. Front Stretcher, " "
 139. Back " " "
 140R. Bottom Gearing Bracket, Ribbon Lap
 140L. " " " " " "
 141. Small Hand Wheel
 142. Large " " Sliver Lap
 143. Middle Size Hand Wheel, Ribbon Lap
 144. Half Moon Guard, Ribbon Lap
 145. Brass Step (Gearing End), Ribbon Lap
 146. " " (Ordinary), " "
 147. Weight Wire (Straight), " "
 148. " " (Cranked), " "
 149. Wire Hook, Ribbon Lap
 150. " " Sliver Lap

- 151. Brass Weight Hook, Sliver Lap
- 152. Brass Roller Bracket, Ribbon Lap
- 153. Wood Roller Bracket for Revolving Clearer.
Ribbon Lap
- 154. Swing for Revolving Clearer, Ribbon Lap
- 155. Swing Cap for ,, ,, ,, ,,
- 156. Curl for ,, ,, ,, ,,
- 157. Brass Bracket for Horn Box, ,, ,,
- 158_R. Table Bracket, Ribbon Lap
- 158_L. ,, ,, ,, ,,
- 159. Top Clearer Cover (Middle), Ribbon Lap
- 160_R. ,, ,, ,, (Gearing End), Ribbon Lap
- 160_L. ,, ,, ,, ,, ,, ,,
- 161_R. ,, ,, ,, (Off "End), ,, ,,
- 161_L. ,, ,, ,, ,, ,, ,,
- 162. Iron Calender Clearer
- 163. Handle Shaft Bracket, Ribbon Lap
- 164. Brass Slide for Gearing End Stand, Ribbon Lap
- 165. Cross Lever, Sliver Lap
- 166. $\frac{7}{8}$ in. Side Shaft Bracket, Sliver Lap
- 167. Large Guard Bracket, ,, ,,
- 168. Driving Shaft Bracket, ,, ,,
- 169. 25 T. Carrier Heart Bracket, Sliver Lap
- 170. Under Clearer Lever
- 171. Long Spider, Sliver Lap
- 172. Short ,, ,, ,,
- 173. Knocking-off Spring, Sliver Lap
- 174. Clutch Weight Bracket, Sliver Lap
- 175. Finger for Clutch Weight ,, ,,
- 176. Clutch Weight, Sliver Lap
- 177. Calender Step
- 178. ,, ,, ,, without Boss, Sliver Lap
- 179. Drum Step
- 180. Small Bracket for Tumbler Strip, Sliver Lap
- 181. ,, ,, ,, Knife ,, ,,
- 182. Calender Wheel Guard Bracket
- 183. 3 in. Calender Clearer Weight, Ribbon Lap
- 184. Bracket for ditto, Ribbon Lap
- 185. Setting-on Handle for $\frac{3}{4}$ in. Shaft, Ribbon Lap

186. Small Curl Holder, Ribbon Lap
 187. Bob Weight for Clearer
 188. 20 T. Bevel $\frac{3}{4}$ in. Bore for 3 in. Calenders, Ribbon Lap
 189. 20 T. Bevel $\frac{7}{8}$ in. Bore for 3 in. Calenders, Ribbon Lap
 190. Sliver Plate, Sliver Lap
 191. Tumbler Spoon, Sliver Lap
 192. Brass Roller, Ribbon Lap
 193. Tumbler Knife, Sliver Lap
 194R. Roller Slide " "
 194L. " " " "
 195. Middle Roller Slide, Sliver Lap
 196. Knocking-off Bracket for Square Ended Rod, Sliver Lap
 197. 26 T. Double Carrier Bracket, Sliver Lap
 198. 40 T. Broad " " " "
 199. Large Guard, Sliver Lap
 200. Tongue for ditto, Sliver Lap
 201. Radius Bracket, Ribbon Lap
 202. Strap Fork for ditto, Ribbon Lap
 203. Large Hole Calender Wheel Guard, Ribbon Lap
 204A. Bonnet Guard, Ribbon Lap
 204. Lap Plate with Nut
 205. Lap Plate without Nut
 206. 40 T. and 14 T. Carrier Bracket, Ribbon Lap
 207. Guard Bracket, Ribbon Lap
 208. Weight for Brake Lever
 209. Coupling Bracket, Ribbon Lap
 210. 56 T. Wood Roller Wheel, Ribbon Lap
 211R. Back Plate for Revolving Clearer, Ribbon Lap
 211L. " " " " " "
 212. " " (Middle) " " " "
 213R. " " for Ordinary " " "
 213L. " " " " " "
 213A. " " (Middle) " " " "
 214R. Rack, Ribbon Lap
 214L. " " "
 215R. " Sliver Lap

- 215L. Rack, Sliver Lap
- 216. Rack Cap
- 217. Rack Bowl
- 218. Oblong Guard, Ribbon Lap
- 219. " " Sliver Lap
- 220R. 50 T. Calender and Drum Wheel Guard, Ribbon
Lap
- 220L. 50 T. Calender and Drum Wheel Guard. Ribbon
Lap
- 221. Bottom Calender Roller with Wrought Iron Shaft,
Ribbon Lap
- 222. Ordinary Calender Roller, Ribbon Lap
- 223. Bottom " " Sliver Lap
- 224. " " " with Wrought Iron
Shaft, Sliver Lap
- 225. Top Calender Roller, Sliver Lap
- 226. Fluted Wood Roller. Ribbon Lap
- 227. 3 in. Calender Roller, " "
- 228. Top Clearer for ditto, " "
- 229. Bearer for Driving Shaft, Ribbon Lap
- 230. Eccentric Lever for Revolving Clearer, Ribbon
Lap
- 231. Lap Guide, Ribbon Lap
- 232R. 3-Wheel Bracket, Ribbon Lap
- 232L. " " " " " "
- 233R. Wood Roller Wheel Guard, Ribbon Lap
- 233L. " " " " " "
- 234. Tumbler Bar, Ribbon Lap
- 235. Small Cast Iron Arm for Revolving Clearer, Rib-
bon Lap
- 236. Small Brass Arm for Revolving Clearer, Ribbon
Lap
- 237. Comb for Revolving Clearer, Ribbon Lap
- 238. Square Guard, Ribbon Lap
- 239. Bracket for Round Ended Stop Rod, Ribbon Lap

STUDS.

- 1s. Stud for Brake, Sliver Lap
- 2s. Stud for 45 T. and 21 T. Brake Wheels, Sliver Lap
- 3s. " " " " " " " Ribbon Lap
- 4s. " " Lap Table
- 5s. " " 41 T. and 26 T. Carrier, Sliver Lap
- 6s. " " 64 T. Carrier, Sliver Lap
- 7s. " " Oblong Guard
- 8s. $\frac{3}{4}$ in. Stud for Round Guard, Sliver Lap
- 9s. Stud for Long Tongue Guard " "
- 10s. $\frac{5}{8}$ in. Stud for Long Tongue Guard, Sliver Lap
- 11s. $\frac{5}{8}$ in. " " Clutch Weight, Sliver Lap
- 12s. $\frac{5}{8}$ in. " " 40 T. Broad Carrier, Sliver Lap
- 13s. Stud for Underclearer Lever
- 14s. " " " " " Ribbon Lap
- 15s. $\frac{5}{8}$ in. Stud for Rack Cap
- 16s. Double Ended Stud for Stop Motion, Ribbon Lap
- 17s. Long Stud for 3-Wheel Bracket " "
- 18s. Short " " " " " "
- 19s. Stud for Round Ended Stop Rod " "
- 20s. " " 100 T. Crown Wheel " "
- 21s. " " 50 T. Carrier for $\frac{7}{8}$ in. Bevel Shaft,
Ribbon Lap

DETAILS FOR HEILMANN COMBERS.

JOHN HETHERINGTON & SONS,
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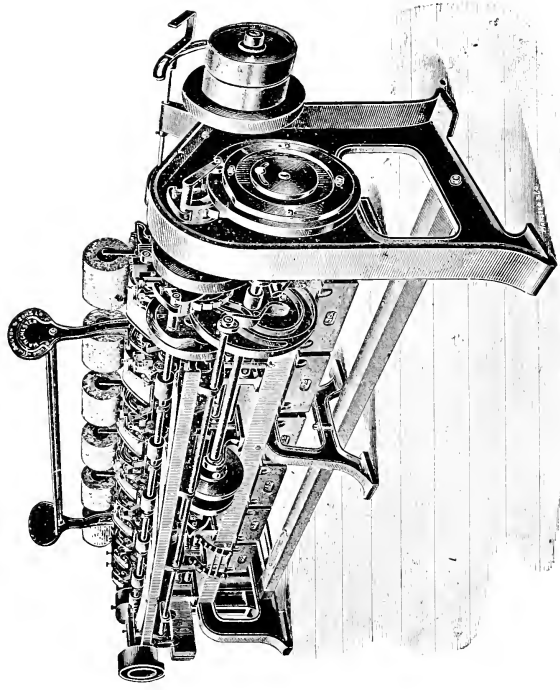
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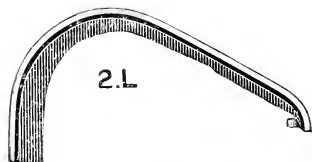
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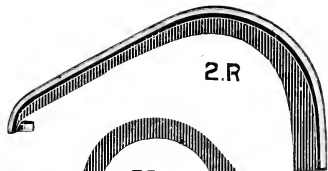
HEILMANN COMBER.



2.L



109.L



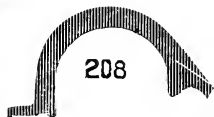
2.R



207



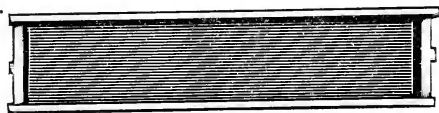
109.R



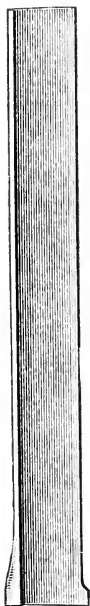
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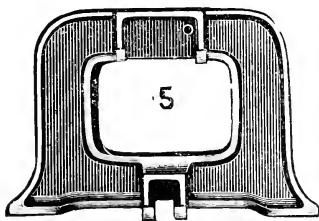
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75.L



206.L



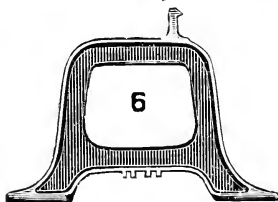
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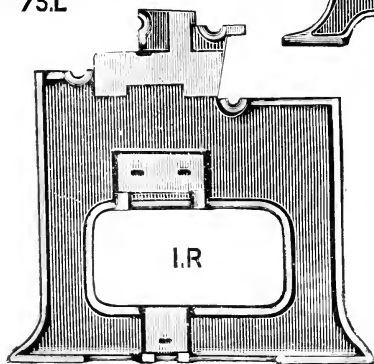
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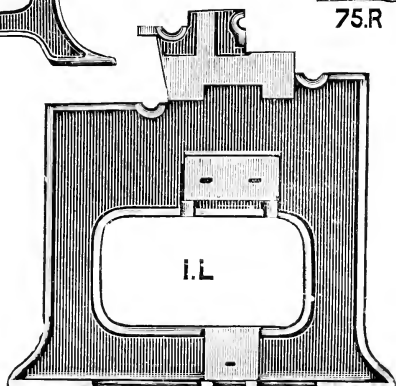
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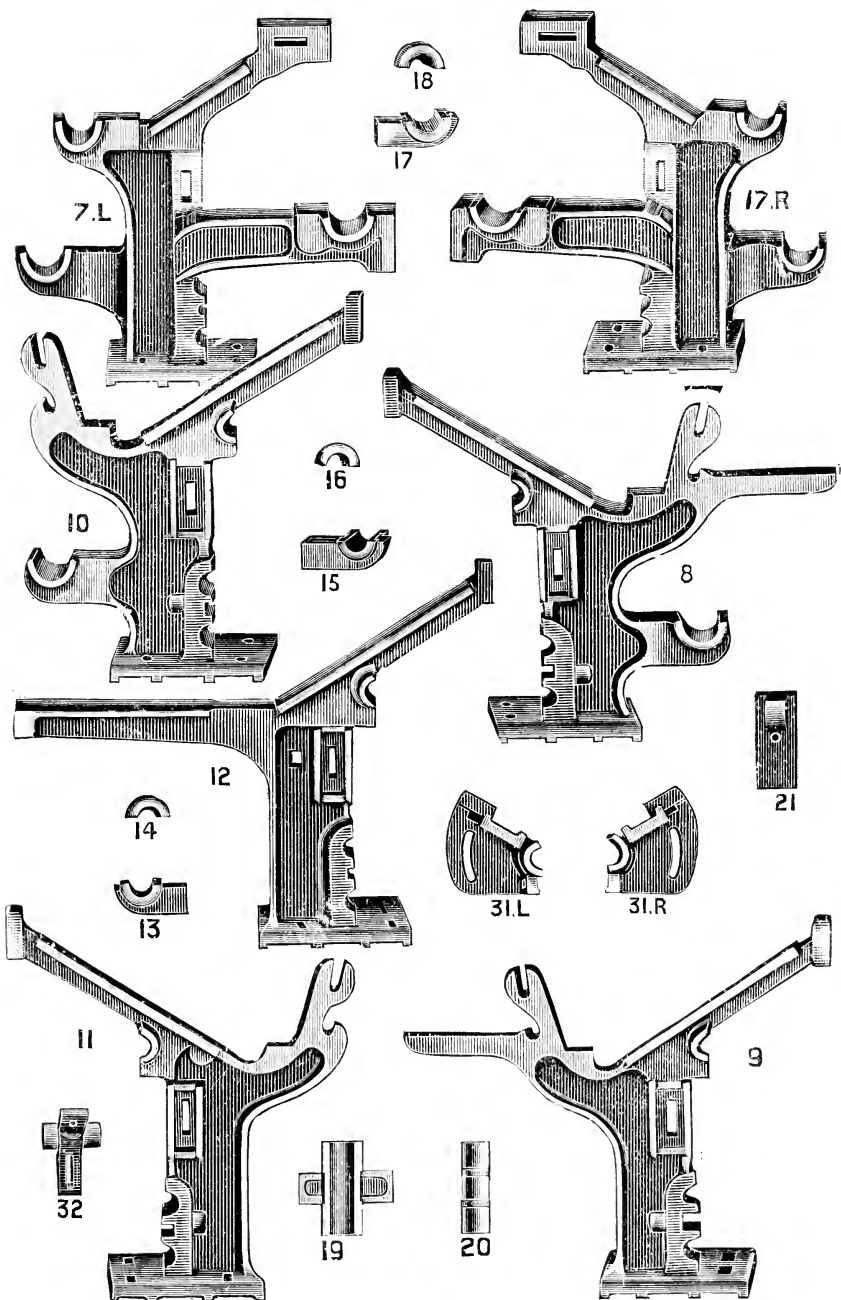
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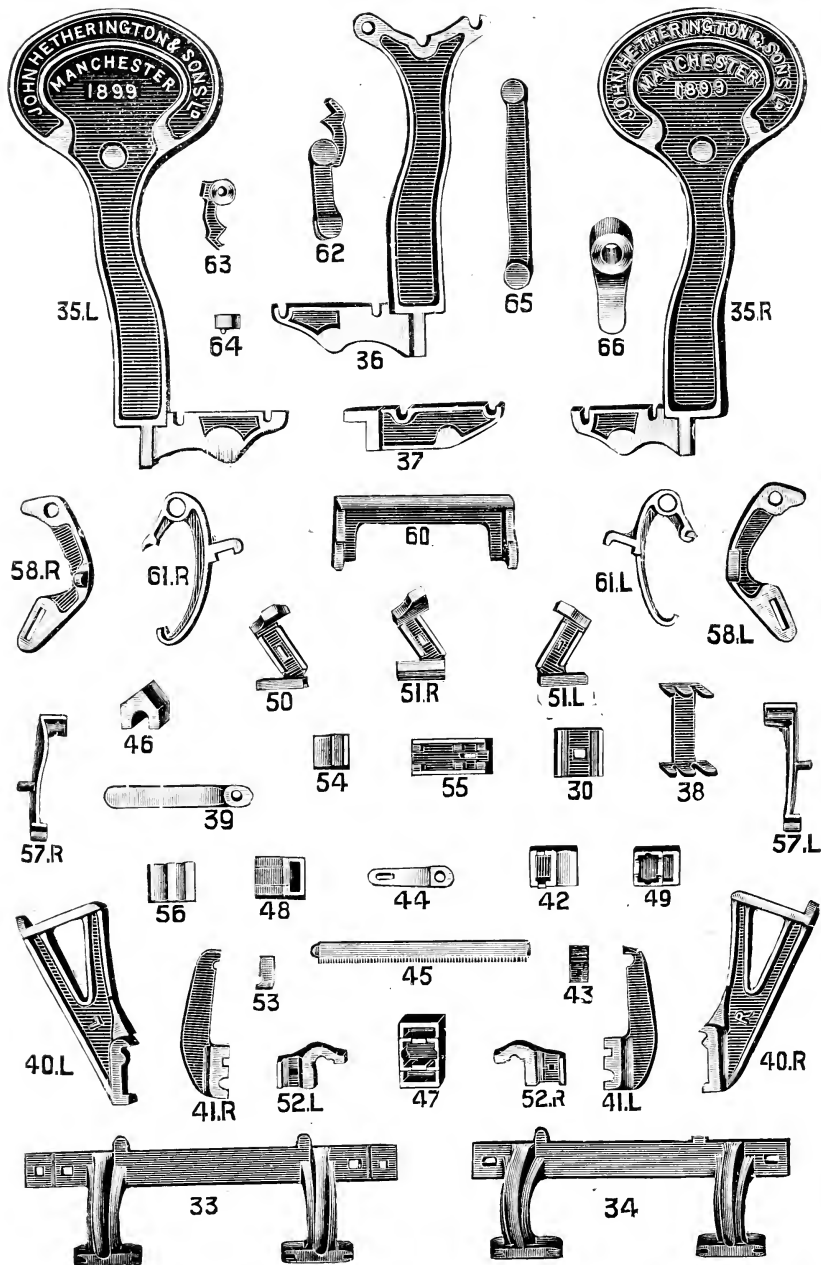


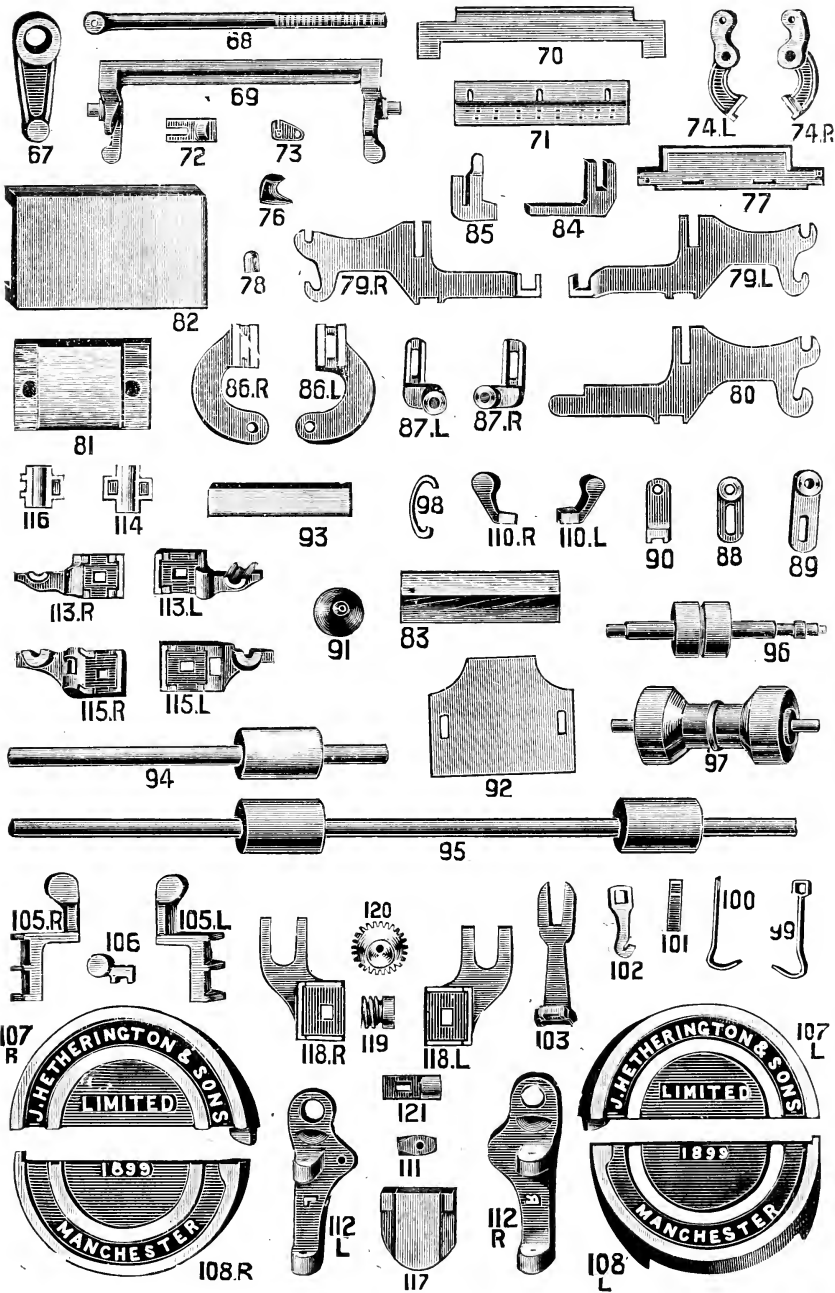
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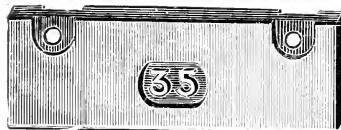


1.L







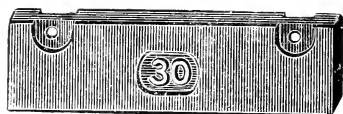


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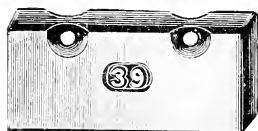


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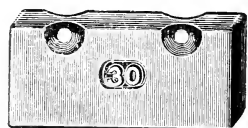
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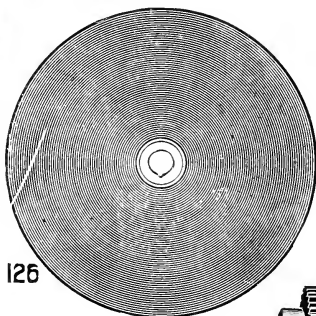
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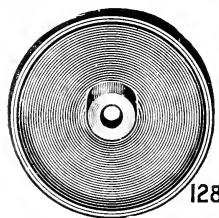
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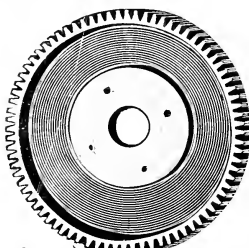
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126



128



133. & 134



136



135



131



130



132



159.L



137



159



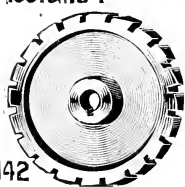
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160



148



142



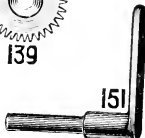
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141



151



138



149



150



147.R



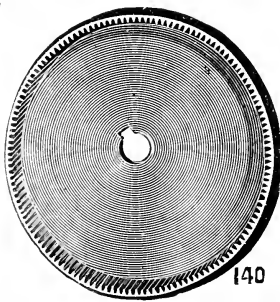
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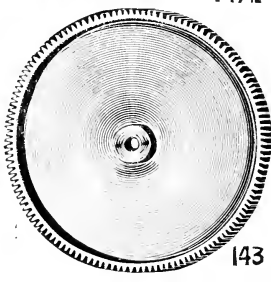
147.L



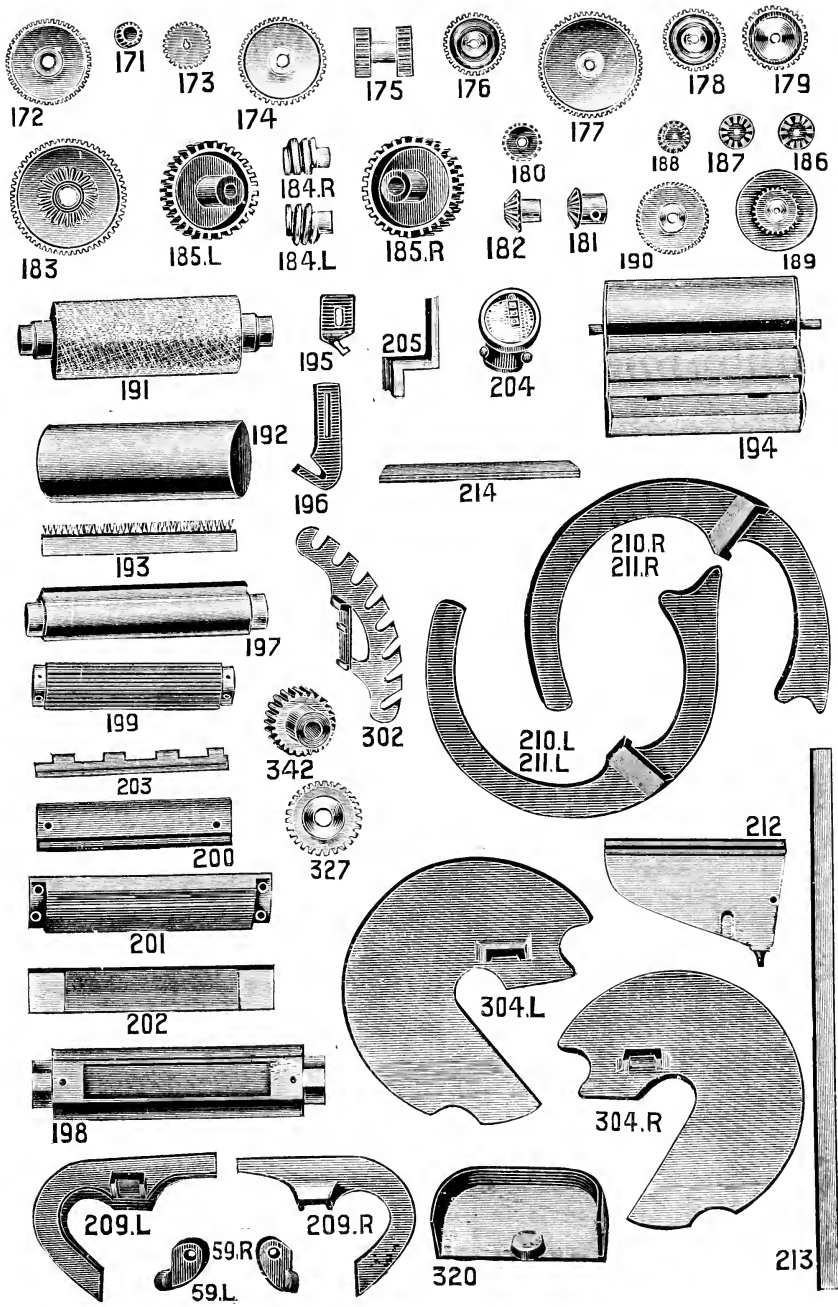
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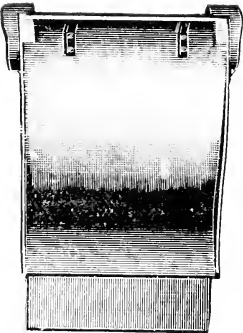


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143

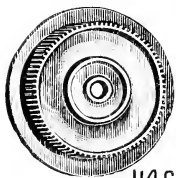




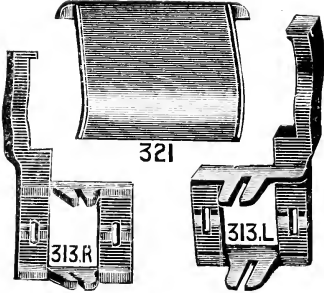
322



312



114.C



321

313.R

313.L



149.C



148.C



147.C



115.C



166.C



142.C



145.C



143.C



144.C



109.C



110.C



146.C



188.C



108.C



164.C



165.C



105.C



116.C



113.C



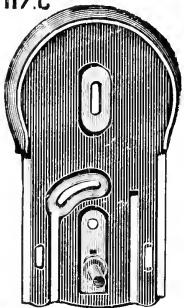
112.C



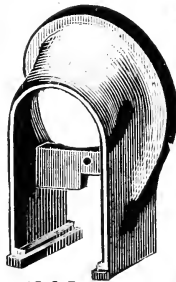
117.C



171.C



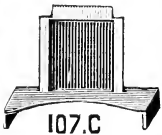
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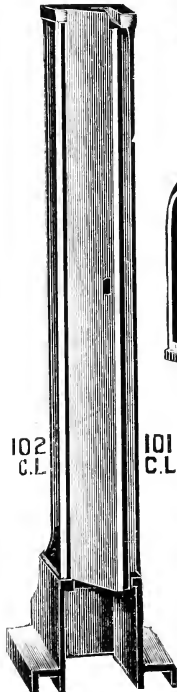
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111.C

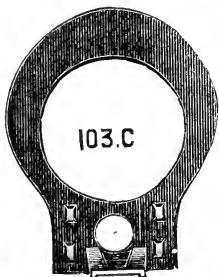


107.C

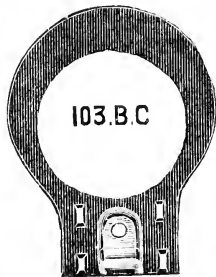


102
C.L

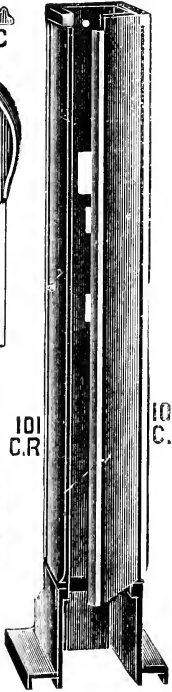
101
C.L



103.C

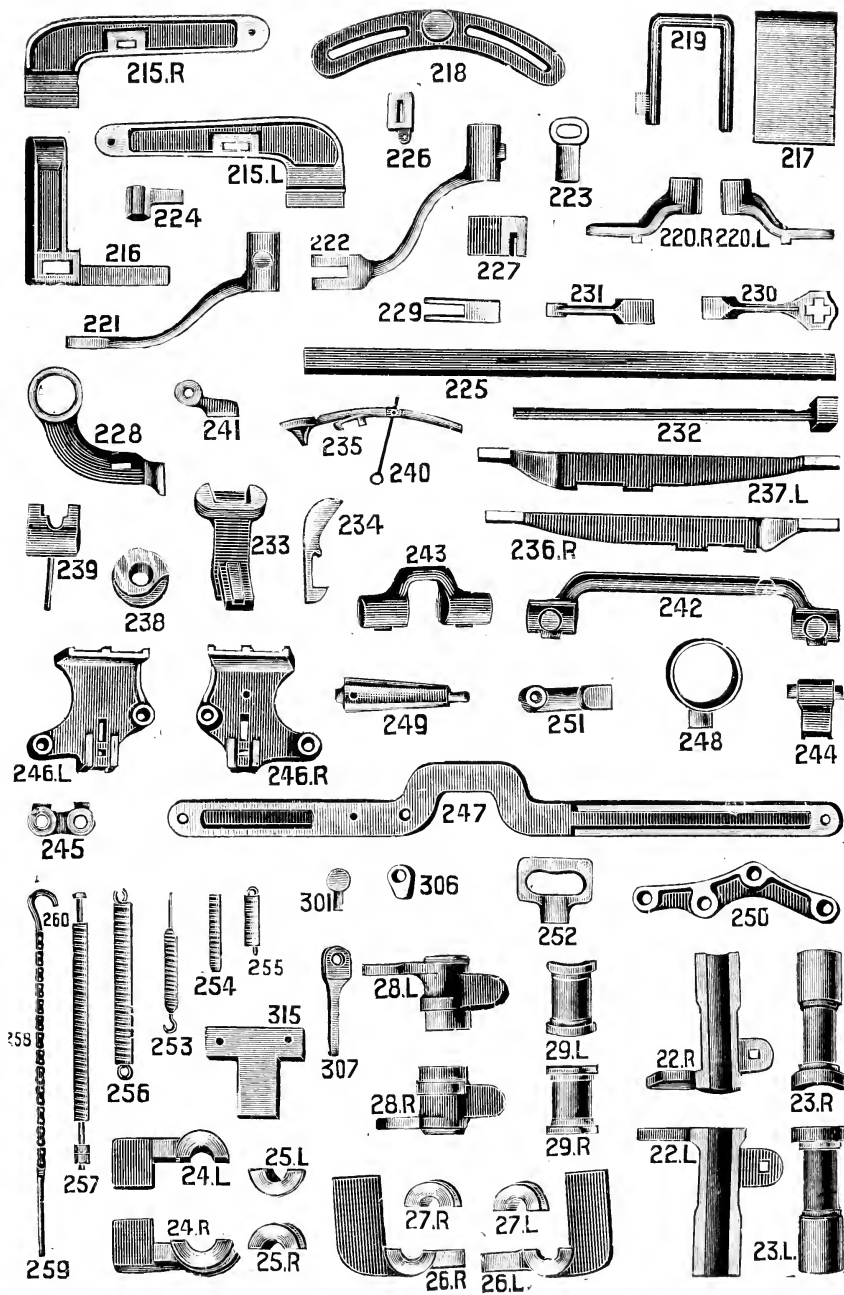


103.B.C



101
C.R

102
C.R



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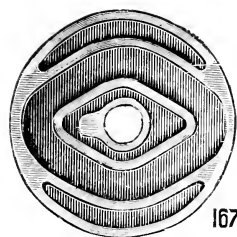
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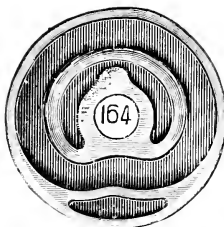
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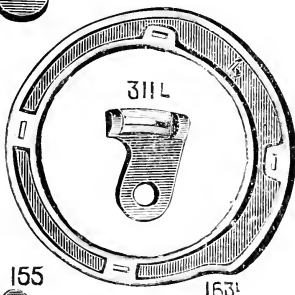
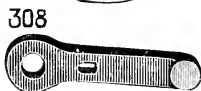
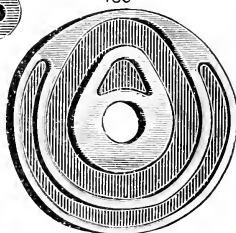
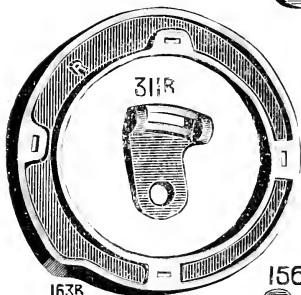
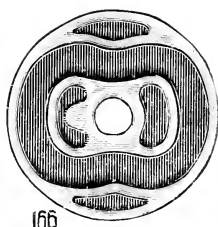
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309 R



309 L

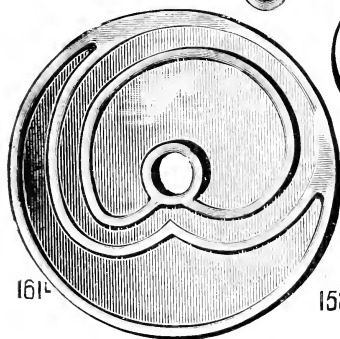
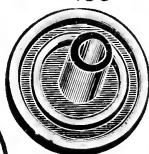


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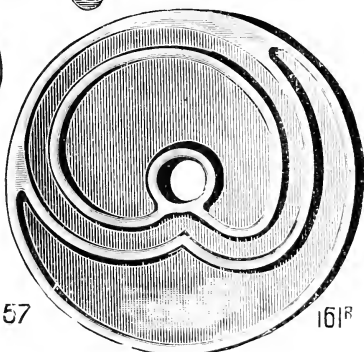
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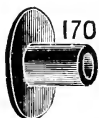
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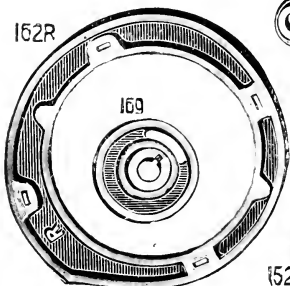


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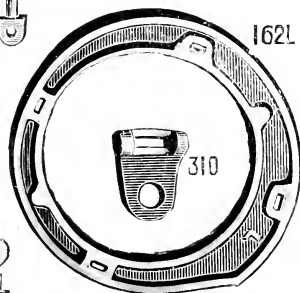
152R



153



152L



310



6.S



19.S



12.S



11.S



31.S



27.S



8.S



14.S



18.S



14.S



15.S



5.S



9.S



7.S



2.S



13.S



30.S



10.S



29.S



20.S



26.S



25.S



3.S



21.S



24.S



28.S



23.S



22.S



16.S



4.S



17.S



1.S

DETAILS FOR HEILMANN COMBERS.

- 1R. Large Frame End
- 1L. " "
- 2R. Gearing End Guard
- 2L. " "
- 3. Comber Beam
- 4. " Rail
- 5. Off End
- 6. Spring Piece
- 7R. Second Gearing Stand
- 7L. " "
- 8. Short Tail Stand with Step
- 9. " " without Step
- 10. Common Stand with Step
- 11. " " without Step
- 12. Long Tail Stand for Off End
- 13. Short Thick Back Cap
- 14. Loose Half Step for ditto
- 15. Long Thick Back Cap
- 16. Loose Half Step for ditto
- 17. Narrow Back Cap
- 18. Loose Half Step for ditto
- 19. Double Boss Cap
- 20. Loose Half Step for ditto
- 21. Double Cap for Stand
- 22R. Driving Shaft Step on Frame End
- 22L. " " "
- 23R. Loose Half Step for ditto
- 23L. " "
- 24R. Cylinder Shaft Step on Frame End
- 24L. " " " "
- 25R. Loose Half Step for ditto
- 25L. " " "
- 26R. Notch Wheel Shaft Step on Frame End
- 26L. " " " "
- 27R. Loose Half Step for ditto
- 27L. " " "

- 28R. Cam Shaft Step on Frame End
- 28L. " " "
- 29R. Loose Half Step for ditto
- 29L. " " "
- 30. Compound Slide
- 31R. Off End Cylinder Shaft Cap for No. 12 Stand
- 31L. " " " " "
- 32. Common Cylinder Shaft Cap for Nos. 10 and 11
 Stands
- 33. End Back Bar
- 34. Middle "
- 35R. Bull Head
- 35L. "
- 36. Middle Bull Head
- 37. Small Back Stand for 8 Head Comber
- 38. Lap Conductor Bracket
- 39. Long Fish Tail or Lap Guide
- 40R. Doffer Slide Stand
- 40L. " "
- 41R. Doffer Slide
- 41L. " "
- 42. Doffer Slide Cap
- 43. Cap for Doffer Knife Shaft
- 44. Small Fish Tail for Doffing Comb
- 45. Doffing Comb
- 46. Top Block
- 47. " Cap (Middle)
- 48. " " (Gearing End)
- 49. " " (Off End)
- 50. Nipper Stand (Middle)
- 51R. " " (End)
- 51L. " " (End)
- 52R. Nipper Stand Slide
- 52L. " "
- 53. Cap for ditto
- 54. Feed Roller Slide
- 55. Double Slide for Detaching Roller
- 56. Cap for ditto
- 57R. Feed Lever
- 57L. "

- 58R. Top Comb Lever
- 58L. " "
- 59R. Thumb Bits for Top Comb Levers
- 59L. " " "
- 60. Top Comb
- 61R. Detaching Weight Hook
- 61L. " "
- 62. Large Lifter Lever
- 63. Small "
- 64. Slide for Lifter Lever
- 65. Lifter Link or Connecting Rod
- 66. Split Lever for Lifter Shaft
- 67. Nipper Shaft Lever
- 68. " " Connecting Rod
- 69. Nipper Frame
- 70. Nipper Knife
- 71. Cushion Plate
- 72. Brass Horse Head
- 73. Horse Tail
- 74R. Nipper Knife Arm
- 74L. " "
- 75R. Table
- 75L. "
- 76. Conductor for Table
- 77. Plate for Sliver Conductors
- 78. Sliver Conductors
- 79R. Draw Box Stand with Foot for Table
- 79L. " " " "
- 80. " " without Foot
- 81. Draw Box Clearer (Wood)
- 82. " " Cover
- 83. Wood Under Clearer for Drawing Head Rollers
- 84. Second Slide for Draw Box Stand
- 85. Third " " "
- 86R. Large Swan Neck Bracket
- 86L. " " "
- 87R. Small " "
- 87L. " " "
- 88. 80T Carrier Wheel Bracket
- 89. 64T " "

- 90. Trumpet Bracket
- 91. Brass Trumpet
- 92. Trumpet Plate
- 93. Sheet Iron Cover for Draw Box Cross Shaft
- 94. Top Calender Roller
- 95. Bottom ,,
- 96. Top Calender Roller for Draw Box
- 97. Bottom ,, ,, ,,
- 98. Weight Hook for Front Roller (Brass)
- 99. ,, ,, ,, (Wire)
- 100. ,, ,, ,, (,,)
- 101. Saddle for 2nd and 3rd Rollers
- 102. Flat Sheet Iron Hooks for 2nd and 3rd Rollers
- 103. Fork Bracket for Drawing Head Box Guard
- 104. Plug ,, ,, ,,
- 105R. Large Cross Shaft Bracket
- 105L. ,, ,, ,,
- 106. Small ,, ,,
- 107R. Circular Guard, Top Part
- 107L. ,, ,, ,,
- 108R. ,, ,, Bottom Part
- 108L. ,, ,, ,,
- 109R. Box Guard
- 109L. ,,
- 110R. Diagonal Shaft Bracket
- 110L. ,, ,,
- 111. Hammer Head
- 112R. Radial Arm Bracket
- 112L. ,, ,,
- 113R. End Brush Bracket
- 113L. ,, ,,
- 114. ,, ,, Cap
- 115R. Middle Brush Bracket
- 115L. ,, ,,
- 116. ,, ,, Cap
- 117. Brush Traverse Box
- 118R. Fork Bracket for Brush Traverse Eccentric
- 118L. ,, ,, ,, ,,
- 119. Worm for Brush Traverse Motion
- 120. Worm Wheel, with Eccentric, for Brush Traverse Motion

121. Bracket for Chain Rod
122. 39 lb. Weight for Draw Box
123. 30 lb. " " "
124. 30 lb. " " Detaching Roller
125. 35 lb. " " " " (10½ in. lap or
Double Nip)
126. Fly Wheel
127. Driving Pulley
128. Loose "
129. 21T Driving Wheel
130. 28T Brush Driving Wheel
131. 34T " Carrier "
132. 30T " Shaft "
133. 80T Cylinder Shaft Wheel (Index Wheel)
134. 80T Cam Shaft Wheel
135. Clutch Box for Single Nip
136. " " Double "
137. Star Wheel
138. Feed Wheel, 12 to 19T
139. 38T Feed Roller Wheel
140. 138T Internal Wheel
141. 18T Detaching Roller Pinion
142. Notch Wheel
143. 142T Plate Wheel for Single Nip
144. 125T " " Double "
145. Cam Shaft Wheel (20 and 21T for Single Nip and
36T for Double)
146. Cradle
- 147R. Extra Cradle for Double Nip
- 147L. " " "
148. Cap for Cradle
149. Catch for Notch Wheel
150. Steel Die for Catch
151. Stud Lever for Cradle
- 152R. Top Comb Eccentric Lever
- 152L. " " " "
153. " " " " for 8 heads
154. " " " for Single Nip
155. " " " for Double Nip
156. Doffer Comb Eccentric

- 157. Doffer Comb Link on Eccentric
- 158. " " " " on Doffer Shaft
- 159R. Cannon Bracket for Star Wheel
- 159L. " " " "
- 160. Brush Carrier Wheel Bracket
- 161R. Large Cam
- 161L. " "
- 162R. Large Cam Ring
- 162L. " " "
- 163R. " " " (Double Nip)
- 163L. " " " " "
- 164. Nipper Cam
- 165. Lifter Cam
- 166. Nipper Cam (Double Nip)
- 167. Lifter " " "
- 168. Large Cam Bush
- 169. Nipper and Lifter Cam Bush
- 170. Bush for 80T Wheel
- 171. Cross Shaft Wheel, 16T for Single Nip and 32T
 for Double, for Draw Box
- 172. 64T Carrier Wheel for Draw Box
- 173. Back Roller Wheel " "
- 174. 50T Wheel on Cross Shaft for Draw Box
- 175. 45T Wheel Double Carrier " "
- 176. Front Roller Wheel " "
- 177. 80T Bossed Carrier " "
- 178. 43T Calender Roller Wheel " "
- 179. 40T Broad Carrier " "
- 180. Middle Roller Wheel " "
- 181. 25T Bevel with Long Boss
- 182. 25T " " Short "
- 183. 60T Spur and 25T Bevel Cylinder Wheel
- 184R. Worm for driving Doffer
- 184L. " " "
- 185R. Worm Wheel on Doffer Shaft 32T
- 185L. " " " "
- 186. 23T Feed Roller Bevel
- 187. 22T Bevel for Diagonal Shaft
- 188. 20T " "
- 189. 55T Bevel and 35T Spur for driving Lap Rollers

190.	47T Lap Roller Wheels					
191.	Circular Brush					
192.	Doffer					
193.	Flat Brush					
194.	Brush Cover					
195.	Bracket for Flat Hook					
196.	Flat Hook for Brush Cover					
197.	Cylinder, Single Nip					
198.	„ Double „					
199.	Fluted Segment for Cylinder, Single Nip					
200.	Half Lap for Cylinder, Single Nip					
201.	Fluted Segment for Cylinder, Double Nip					
202.	Half Lap for Cylinder, Double Nip					
203.	Brass Strip for Cylinder					
204.	Indicator					
205.	Indicator Bracket					
206R.	Guard for 80T Wheel, Back Part					
206L.	„ „ „ „					
207.	„ „ „ Tongue					
208.	„ „ „ Front Part					
209R.	Brush Wheel Guard					
209L.	„ „ „					
210R.	Guard for 142T Plate Wheel, Single Nip					
210L.	„ „ „ „					
211R.	Guard for 125T Plate Wheel, Double Nip					
211L.	„ „ „ „					
212.	Angular Conductor					
213.	Flat Rod to support Angular Conductor					
214.	Brass Angular Clearer					
215R.	Upright Bracket for Short Stop Rod for Stop					
						Motion
215L.	„ „ „ „ „ „					
216.	L Lever					
217.	Wedge Bracket					
218.	Strap Fork Lever					
219.	Strap Fork					
220R.	Beam Bracket for Cross Shaft					
220L.	„ „ „ „					
221.	Back Lever on					
222.	Front „					

223.	Swivel for Front Lever	for Stop Motion
224.	Finger for Stop Rod	" "
225.	Flat Rod	" "
226.	Spring Bracket for Flat Rod	" "
227.	Weight " "	" "
228.	Eccentric Lever on Eccentric	" "
229.	" " on Rocking Shaft	" "
230.	Star Lever	" "
231.	Rocking Shaft Lever for Coiler	
	Knocking-off Rod	" "
232.	Coiler Knocking-off Rod	" "
233.	Tumbler Bracket for Coiler	" "
234.	Tumbler for Coiler	" "
235.	Front Tumbler for Knife	
236R.	Front Knife	" "
237L.	" "	" "
238.	Eccentric	" "
239.	Balance Weight for Knife	" "
240.	" " " Front Tumbler	" "
241.	Rocking Shaft Bracket for Long Tail Stand	
	for Stop Motion	
242.	Coupling for Rocking Shaft, 6 Heads	" "
243.	" " " " 8	" "
244.	Rocking Shaft Bearer Bracket	" "
245.	Connecting Link for Setting-on Rod	" "
246R.	Table Bracket	" "
246L.	" "	" "
247.	Knocking-off Lever or Cross	
248.	Strap Ring	
249.	Pillar for Strap Ring	
250.	Bull Dog Bracket for Stop Rod	
251.	Skittle Bracket for Knocking-off Lever	
252.	Handle for Stop Rod	
253.	Feed Spring	
254.	Nipper "	
255.	Notch Wheel Spring	
256.	Beam Spring for Stop Motion	
257.	Spring for Flat Rod "	
258.	Comber Weight Chain	
259.	Stirrup for ditto	

- 260. Hook for Comber Weight Chain
- 261. Long Steel Detaching Roller
- 262. Plain Top „
- 263. Heavy Brass „
- 264. End Slide for Long Steel Detaching Roller
- 265. Cap for ditto
- 266. End Slide for Long Feed Roller
- 267. Cap for ditto
- 268. Bush for Top Detaching Roller
- 269. Brass Half-stick for Detaching Roller Bush
- 270. Long Steel Feed Roller
- 271. Top Feed Roller
- 272. Driving Shaft, $1\frac{1}{4}$ in. dia.
- 273. Collar for ditto
- 274. Cam Shaft, $1\frac{1}{4}$ in. dia.
- 275. Notch Wheel Shaft, $1\frac{1}{4}$ in. dia.
- 276. Collar for ditto
- 277. Cylinder Shaft, $1\frac{1}{8}$ in. dia.
- 278. Collar for ditto
- 279. Lifter Shaft, $1\frac{1}{4}$ in. dia.
- 280. Nipper Shaft, $1\frac{1}{2}$ in. dia.
- 281. Brush Shaft, $\frac{3}{4}$ in. dia.
- 282. Collar for ditto
- 283. Doffer Shaft, 1 in. dia.
- 284. Collar for ditto
- 285. Doffer Knife Shaft, $\frac{5}{8}$ in. dia. for 6 heads, $\frac{3}{4}$ in. dia.
for 8 heads
- 286. Lap Roller Shaft, $\frac{5}{8}$ in. dia.
- 287. Long Fish Tail Shaft, $\frac{5}{8}$ in. dia.
- 288. Diagonal Shaft, $\frac{9}{16}$ in. dia.
- 289. Radial Arm Shaft, $\frac{3}{4}$ in. dia.
- 290. Cross Shaft for Draw Box, $\frac{3}{4}$ in. dia.
- 291. Small Lifter Shaft, $\frac{5}{8}$ in. dia.
- 292. Nipper Frame Shaft, $\frac{5}{8}$ in. dia.
- 293. Top Comb Lever Shaft, 1 in. dia.
- 294. Star Wheel Shaft, $\frac{3}{4}$ in. dia.
- 295. Creel Rods, $\frac{3}{4}$ in. dia.
- 296. Cross Shaft for Stop Motion, $\frac{7}{8}$ in. dia.
- 297. Short Stop Rod for Stop Motion, $\frac{3}{4}$ in. dia.
- 298. Long Stop Rod under table for Stop Motion,
 $\frac{3}{4}$ in. dia.

- 299. Long Ordinary Stop Rod, $\frac{3}{4}$ in. dia.
- 300. Shaft for Strap Ring
- 301. Swivel for Knocking-off Lever on Coiler
- 302. Pipe Rack
- 303.
- 304R. Internal Wheel Guard
- 304L.
- 305. Swivel for Nipper Lever
- 306. Lock Stop for Setting-on Rod.
- 307. Lever for ditto
- 308. Nipper Cam Lever
- 309R. Lifter ,, ,,
- 309L. ,, ,, ,,
- 310. Horse Shoe for Nipper Shaft
- 311R. Horse Shoe for Lifter Shaft
- 311L.
- 312. Drawing Head Fork for Top Calender Roller
- 313R. Table Bracket for 8 Head Comber
- 313L.
- 314. Bob Weight for Under Clearer
- 315. Guard for Calender Roller Bevels for 8 Heads
- 316. Steel Bowl for Stud Lever
- 317. ,, ,, Top Comb Lever
- 318. ,, ,, Nipper and Lifter Cam
- 319. ,, ,, Large Cam
- 320. Guard for Lap Roller Wheels
- 321. Lap Conductor
- 322. Back Tin
- 323. Fluted Wood Roller
- 324. Coupling for Cylinder Shaft
- 325. Wood Clearer for Detaching Roller
- 326. Name Plate
- 327. 36T Cam Shaft Wheel for Double Nip
- 328. Diagonal Shaft
- 329. Brush ,,
- 330. Cylinder ,,
- 331. Small Fish Tail or Doffer Knife Shaft
- 332. Chain Pulley Rod
- 333. Lap Roller Shaft
- 334. $\frac{9}{16}$ in. Collar

335. $\frac{5}{8}$ in. Collar
 336. $\frac{3}{4}$ " "
 337. $\frac{9}{16}$ " "
 338. Chain Pulley.
 339.
 340. Long Angle Bracket for Coiler
 341. Short " " "
 342. 24T Brush Wheel for Double Nip

COILERS.

- 101C.R. Coiler Trunk
 101C L. " "
 102C.R. " Door
 102C.L. " "
 103C. " Table
 103B.C. " " with Boss
 104C. " Bonnet
 105C. " " Lid
 106C. " Bottom
 107C. " " Front Plates
 108C. " " Back
 109C. " Shaft Bracket
 110C. Fast Bracket for Coiler Calender Roller
 111C. Swivel " " " "
 112C. Clearer " " " "
 113C. Can Wheel Stud
 114C. Can Wheel
 115C. Press Wheel
 116C. Adjustable Shaft Bracket
 117C. Shaft Block for "
 142C. 17T Coiler Stud Wheel
 143C. 19T or 20T Coiler Shaft and Calender Bevel
 144C. " Shell Bevel for Coiler Stud and
 Calender
 145C. 20T Spur Wheel for Coiler Calender
 146C. 13T Pinion for Driving Can Wheel
 147C. Coiler Carrier Wheel 35T
 148C. 36T and 13T Compound Wheel
 149C. 35T Bossed Carrier for Press Wheel

- 164c. Short Shaft Calendar Roller
165c. Long " " " for Carrying Bevel
166c. Spring for Calendar Rollers
171c. Latch for Coiler Door
188c. Coiler Shaft

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- | | |
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| 2s. | „ Bowl „ „ |
| 3s. | „ Stud for Clutch Box |
| 4s. | „ „ Top Comb Lever |
| 5s. | „ Bowl „ „ „ |
| 6s. | „ Stud for Nipper or Lifter Cams |
| 7s. | „ Bowl „ „ „ |
| 8s. | „ Stud for Large Cam |
| 9s. | „ Bowl „ „ |
| 10s. | Stud for Small Swan Neck Bracket (Draw Box) |
| 11s. | „ Large „ „ „ „ |
| 12s. | „ 80T Carrier Wheel Bracket „ „ |
| 13s. | „ 64T and 45T Double Carrier Wheel Bracket (Draw Box) |
| 14s. | „ for Guard, long and short (Draw Box) |
| 15s. | Knob for Box Guard „ „ |
| 16s. | Stud for Eccentric Lever (Stop Motion) |
| 17s. | „ Front „ „ „ |
| 18s. | „ L „ „ „ |
| 19s. | Stand Stud for Cross |
| 20s. | Stud for Doffer Eccentric |
| 21s. | „ „ Link |
| 22s. | Lifter Link Stud (Long) |
| 23s. | „ „ „ (Short) |
| 24s. | Nipper Link Stud |
| 25s. | Connecting Rod Stud |
| 26s. | 80T Wheel Guard Stud |
| 27s. | Cast Iron Stud for 34T Carrier |
| 28s. | Stud for Feed Lever |
| 29s. | „ Short Cross |
| 30s. | „ Long „ |
| 31s. | „ Traverse Motion Box |

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